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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/912,418      | 07/26/2001  | Tilman Haug          | 225/50220           | 4254             |

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EXAMINER

BLACKWELL RUDASIL, GWENDOLYN A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1775

DATE MAILED: 10/03/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/912,418

Applicant(s)

HAUG ET AL.

Examiner

Gwendolyn A. Blackwell-Rudasill

Art Unit

1775

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Group I, claims 1-11 in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Rejoinder of the withdrawn process claims will be considered if it is determined that the product claims contain patentable subject matter. *See MPEP 821.04.*

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless –*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

*(e) the invention was described in-*

*(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or*

*(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).*

3. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 5,309,874, Willermet et al.

Willermet et al., disclose a substrate, such as aluminum, aluminum-silicon alloy, titanium, titanium-aluminum alloys, and ferrous alloys, that have an interlayer and film formed

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on the surface that creates a wear resistant coating system. The interlayer can have a graded or varying composition that can improve the adherence of the interlayer to the metal substrate, (column 3, lines 5-10). The surface layer, the film, predominantly comprises a first group consisting of amorphous or nanocrystalline silicon nitride, silicon carbide, silicon dioxide, silicon oxy-nitride, silicon-aluminum-oxy-nitride, titania, zirconia, and mixtures thereof. The interlayer is made of constituents from the group consisting of silicon, silicon carbide, silicon nitride, boron nitride, and mixtures thereof, meeting the requirements of claims 1-7, (columns 5-6, lines 61-7).

4. Claims 1-3, 5, and 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent no. 6,436,519 B2, Holzschuh.

Holzschuh discloses a substrate with a wear resistant coating. The substrate can be HSS, (column 3, lines 57-62). The coating is made of a bonding layer and surface layer. Titanium and aluminum should be present in the bonding layer, wherein the bonding layer can be aluminum titanate. Aluminum oxide, which is in the surface layer, is rooted in the bonding layer, (column 2, lines 40-67). In addition, a titanium containing layer can be formed as a cover layer to the aluminum oxide layer, meeting the requirements of claims 1-3, 5, and 8-11, (column 4, lines 15-25).

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

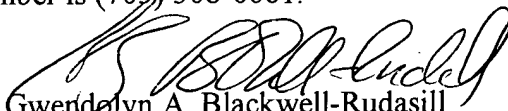
United States Patent no. 4,919,773, Naik, discloses a method of coating metallic substrates to obtain an erosion resistant surface.

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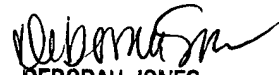
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gwendolyn A. Blackwell-Rudasill whose telephone number is (703) 305-9741. The examiner can normally be reached on Monday - Friday; 6:30 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (703) 308-3822. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
Gwendolyn A. Blackwell-Rudasill  
Examiner  
Art Unit 1775

gbr  
September 27, 2002

  
DEBORAH JONES  
SUPERVISORY PATENT EXAMINER